

Abstract of the invention

The present invention provides a material combining properties possessed by crosslinked polymers with stretchability or viscoelasticity, and the producing method thereof. The present invention provides a material comprises a polyrotaxane and a polymer, wherein the polyrotaxane comprises a cyclic molecule, a linear molecule which is included in cavities of the cyclic molecules in a skewered manner, and a capping group which is located at each end of the linear molecule to prevent the dissociation of the cyclic molecules, and the polyrotaxane is bound to a part of or all of the polymer through the cyclic molecule.